What is claimed is:

5

- A method for robustly coating a polymeric hydrogel onto a metal surface. The
 method entails three basic steps: application to the surface of a liquid mixture, gelling
 of this mixture to form a hydrogel network, and chemisorption of this network to the
 surface. The solidification and chemisorption steps proceed concurrently.
- 2. A sensor employing a coating described in claim 1 to provide sensitivity and/or selectivity to a target substance.